Pan-European monitoring of Important Bird Areas

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1. The BirdLife International Important Bird Area (IBA) Programme

The Important Bird Areas (IBA) Programme of BirdLife International is a worldwide initiative aimed at identifying and protecting a network of core areas (or 'critical sites') for the conservation of the world's birds. The first IBA inventory to cover the whole of Europe was published in 1989 (Grimmett & Jones 1989). Facilitated since 1990 by a coordinator at the BirdLife International Secretariat and, increasingly, by national IBA Coordinators in individual countries, the actions of many individuals and organisations have coalesced into a large-scale European IBA Programme. This has resulted in the production of twenty national IBA inventories, and more recently, a new pan-European inventory (Heath & Evans 2000). As at October 2001, a total of 4000 IBAs had been identified in Europe. Building on this inventory of sites, the European IBA Programme for the last decade has addressed site-oriented research and action, encompassing habitat management, education, advocacy, national and international legal protection, and monitoring, the focus of this article.

2. Monitoring IBAs

IBA monitoring is one of three themes central to the Pan-European Bird Monitoring

Tab. 1. Core indicators used for measuring the conservation status of IBAs in Europe and data availability.

Indicator type	Indicator	Description	N° records in WBDB*
State	Site boundary and area	Paper or digital map of each IBA boundary and a measure of its area (hectares).	4000
	Habitat	Inventory of all primary habitats (10 types) covering >5% of each IBA and the total area of each type within each IBA.	12 000
	Key bird populations	Population size and trend (during past 10 years) of each bird species for which each IBA was selected (average of 4 species per IBA).	17 000
	Land-use	Inventory of all land-use (12 types) covering >5% of each IBA and the % cover of each land-use within each IBA.	12 000
Pressure	Threats	Inventory of key threats (12 types) and their impact (using standard IBA methodology) within each IBA	14 000
Response	Protection status	Inventory of over-lapping protected areas and the extent of over-lap between each IBA and the protected area	16 000
	Management plan	Whether each IBA is (partly or wholly) covered by an existing management plan	650

*WBDB - BirdLife International World Bird Database (a purpose-built database used for the management, analysis and reporting of data held by BirdLife International).

Tab. 2. Draft monitoring and reporting cycle for IBA core indicators.

Indicator type	Indicator	Proposed monitoring and reporting cycle										
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
State	Site boundary and area	x	x	x	x	x	x	x	x	x	x	x
	Habitat			x				x				x
	Key bird populations	x	x	x	x	x	x	x	x	x	x	x
	Land-use			x				x				x
Pressure	Threats	x	x	x	x	x	x	x	x	x	x	x
Response	Protection status	x	x	x	x	x	x	x	x	x	x	x
	Management plan	x	x	x	x	x	x	x	x	x	x	x

Strategy. Monitoring is necessary to track the state of IBAs, the pressures acting upon them and the responses being made to conserve them. The results of monitoring are needed to inform decisions, especially those concerned with to setting conservation priorities, diagnosing problems and predicting change. There are several benefits to be derived from coordinating IBA monitoring and having an agreed set of common standards at a European scale:

- At a local level, staff have a framework within which they can develop their programme of site monitoring and can have confidence that it is supported and being implemented at a European level.
- If data are collected, managed and exchanged following accepted standards, the costs of data exchange are substantially reduced. Less time is spent interpreting data from different sources, allowing prompt comparison of results.
- Common standards allow data to be provided at the right time and in the right format. The data can then be aggregated and information produced at a range of geographical scales. This enables reporting on the conservation status of IBAs at regional, national and continental levels.

Standards for monitoring core areas need to be sufficiently robust so that they can be implemented consistently across Europe by different organisations, yet flexible enough to cater for the different operational practices and systems that have evolved in each country. There are two main elements of common standards for monitoring IBAs:

- Indicators.
- Monitoring cycle and reporting.

3. Indicators

The conservation status of an IBA is complex and comprises many interacting variables. Hence, any monitoring scheme needs to identify which data are robust enough to allow simplification into a set of core data that are easily measured, understood and communicated, and are scientifically sound. For this purpose, indicators are used. Indicators must signal key issues to be addressed through interventions and other actions, and hence build a bridge between the fields of policy and science. Once selected, they give direction to monitoring and research programmes.

In order to be effective, an indicator must:

- Quantify information so that its significance is apparent.
- Be user-driven (to help summarise

information of interest to the intended audience).
- Be scientifically credible.
- Be responsive to changes in time and space, or both.
- Be simple and easily understood by the target audience.
- Be based on information that can be collected realistically.

Indicators are generally developed within a framework that incorporates three main categories:
- State: quantity and quality of IBAs (*e.g.* population levels of key bird species).
- Pressure: threats to IBAs (*e.g.* impact of hunting).
- Response: conservation of IBAs (*e.g.* % of area under legal protection).

The conservation status of IBAs has been measured using seven core indicators, which have generated a large amount of data to date (Tab. 1). Most of these data are available online at http://www.birdlife.org.uk/sites.

4. Monitoring cycle and reporting

There is a need to monitor and report on indicators within an agreed cycle. This cycle needs to take account of the scale of monitoring required, the likely rate of change in indicator levels and reporting needs. For IBAs, the most obvious cycle to operate within is the 4-year cycle of the BirdLife International Global Partnership Meetings, for which the next meeting is scheduled for 2004. The draft cycle being discussed presently within the BirdLife Partnership would ensure that five of the seven core indicators would be re-measured annually in all IBAs and at least

once every four years for the remaining two indicators (Tab. 2).

Reports on the state and trends of indicators at IBAs are required for a variety of purposes and on a variety of scales. The common standard is to allow the separate country accounts to be compared and aggregated to produce a European account on the overall state of IBAs, the pressures acting upon them and the action being taken to conserve them. This would feed into a new indicator-based report on the state of the world's birds and IBAs that will be launched at the next BirdLife Global Partnership Meeting in 2004.

5. Problem analysis

At a 1-day workshop held in Gibraltar in September 2001, IBA Coordinators from most European countries analysed the problems facing the achievement of the monitoring and reporting cycle\ proposed in Tab. 2. Problems of course varied greatly between countries, but included often inadequacies in:
- Practical methods for measuring indicators.
- Numbers of skilled field workers.
- Clear reporting procedures.
- Design and use of data management systems.
- Inter-organisational coordination of monitoring schemes.

6. Conclusions

Currently, BirdLife International is working (together with others) to overcome the problems noted above so that IBAs can be monitored on a pan-European scale. With

the use of the existing systematic information base, which will be strengthened through monitoring, the ultimate prospects for greater, more complete and more durable success in the conservation and wise use of IBAs in Europe are better than ever before. The challenge for governments and NGOs in a position to put this data to use is to make these prospects reality. BirdLife urges all executive agencies to apply the highest levels of commitment to this aim, and stands ready to collaborate wherever and whenever possible.

References

Grimmett, R. F. A & T. A. Jones. (Eds). 1989. Inventory of Important Bird Areas in the European Community. – International Council for Bird Preservation, Cambridge, U.K.

Heath, M. F. & M. I. Evans. (Eds). 2000. Important Bird Areas in Europe; priority sites for conservation. 2 Vols. – BirdLife International, Cambridge, U.K. (BirdLife Conservation Series No 8).